STATE OF SOUTH CAROLINA (Caption of Case) In re: Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity for a Base Load Review Order for the Construction and Operation of a Nuclear Facility in Jenkinsville			BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA COVER SHEET DOSIBLE DOCKET NUMBER: 2008 - 196 - E			
(Please type or print			SC Bar Number	·· 5754		
Submitted by: Address:	Belton T. Zeigle Pope Zeigler, Ll		Telephone:	803.354.4949		
Address.	1411 Gervais St		Fax:	803.354.4899		
	Columbia, SC		Other:	803.530.1189		
			Email: bzeigler	@popezeigler.com		
Other:	Relief demanded in		TURE OF ACTIO		's Agenda expeditiously t apply)	
		Affidavit	∠ Letter		Request	
☐ Electric/Gas		Agreement	Memorandu	ım	Request for Certificatio	
☐ Electric/Teleco	ommunications	Answer	☐ Motion		Request for Investigation	
☐ Electric/Water		Appellate Review	Objection		Resale Agreement	
☐ Electric/Water	Telecom.	☐ Application	Petition		Resale Amendment	
☐ Electric/Water	-/Sewer	☐ Brief	Petition for	Reconsideration	Reservation Letter	
Gas		Certificate	Petition for	Rulemaking	Response	
Railroad		Comments	Petition for F	Rule to Show Cause	Response to Discovery	
Sewer		Complaint	Petition to I	ntervene	Return to Petition	
☐ Telecommunic	cations	Consent Order	Petition to In	tervene Out of Time	☐ Stipulation	
☐ Transportation	1	Discovery	Prefiled Tes	stimony	Subpoena	
☐ Water		Exhibit	Promotion		Tariff	
☐ Water/Sewer		Expedited Considerat	ion Proposed O	order	Other:	
Administrative	e Matter	Interconnection Agreem	ent Protest			
Other:		Interconnection Amend	ment Dublisher's	Affidavit		
		☐ Late-Filed Exhibit				

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2008-196-E

IN RE:

In re:

Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity for a Base Load Review Order for the Construction and Operation of a Nuclear Facility in Jenkinsville, South Carolina

CERTIFICATE OF SERVICE QUARTERLY REPORT ENDING MARCH 31, 2013

This is to certify that I have caused to be served this day one (1) copy of the Confidential Version and ten (10) copies of the Public Version of South Carolina Electric & Gas Company's Letter and Quarterly Report Ending March 31, 2013, upon the person named below, via hand delivery and electronic mail to the PSC as listed below:

The Honorable Jocelyn Boyd Chief Clerk and Administrator Public Service Commission of South Carolina 101 Executive Center Drive Columbia, South Carolina 29210 jocelyn.boyd@psc.sc.gov

Belton T. Zeigle

Columbia, South Carolina This 13th day of May, 2013



COLUMBIA | CHARLOTTE

RECEIVED

SC PUBLIC SERVICE COMMISSION

Belton T. Zeigler

Partner

2013 MAY 13 PM 12: 00 bzeigler@popezeigler.com

MAIN 803 354.4900

FAX 803 354.4899

Pope Zeigler, LLC 1411 Gervais St., Ste 300 Post Office Box 11509 Columbia, SC 29211 popezeigler.com

244043

May 13, 2013

The Honorable Jocelyn Boyd Chief Clerk and Administrator Public Service Commission of South Carolina 101 Executive Center Drive Columbia, South Carolina 29210

Quarterly Report of SCE&G Concerning Construction of V.C. Summer Nuclear Station Re:

Units 2 and 3

Dear Ms. Boyd:

Enclosed please find informational copies of South Carolina Electric & Gas Company's (the "Company" or "SCE&G") Quarterly Report (the "Report") for the period ending March 31, 2013, related to the construction of V.C. Summer Nuclear Station Units 2 and 3 (the "Units"). This Report is being filed with the South Carolina Office of Regulatory Staff ("ORS") pursuant to the Base Load Review Act, S.C. Code Ann. § 58-33-277 (Supp. 2012) and the provisions of Order No. 2009-104(A) of the Public Service Commission of South Carolina (the "Commission").

Because this Report contains certain commercially sensitive information, SCE&G is filing both redacted (Public) and unredacted (Confidential) versions of this Report with the Commission and with ORS. For your convenience, we are providing you with ten (10) copies of the Public version of this Report. SCE&G is also providing one (1) copy of the Confidential version of this Report and is hereby petitioning the Commission to enter a confidentiality order protecting the commercially sensitive information contained therein from disclosure, as set forth below.

The Confidential version of this Report contains confidential information related to the pricing and pricing terms of the Engineering, Procurement and Construction Agreement (the "EPC Contract") between SCE&G and a consortium consisting of Westinghouse Electric Company, LLC and Chicago Bridge & Iron, formerly the Shaw Group, (collectively, the "Contractor"). The EPC Contract contains confidentiality provisions that require SCE&G to protect proprietary information that the Contractor believes to constitute trade secrets and to be The Contractor has requested that SCE&G maintain the commercially sensitive. confidentiality of certain information contained in Appendix 2 and Appendix 3. confidential information has been redacted from the Public Version of these appendices.

POPE ZEIGLER

LAW FIRM

COLUMBIA | CHARLOTTE

The Honorable Jocelyn Boyd Public Service Commission of South Carolina May 13, 2013 page † 2

In keeping with the Contractor's request and the terms of the EPC Contract, SCE&G respectfully requests that the Commission find that the Confidential version of the Report contains protected information and issue a protective order barring the disclosure of certain portions of Appendix 2, and Appendix 3 of the Report under the Freedom of Information Act, S.C. Code Ann. §§ 30-4-10 et seq., 26 S.C. Code Ann. Regs. 103-804(S)(1), or any other provision of law, except in its public form. Pursuant to 26 S.C. Code Regs. 103-804(S)(2), the determination of whether a document may be exempt from disclosure is within the Commission's discretion. Such a ruling in this instance would be consistent with the Commission's prior rulings in Docket No. 2008-196-E, Docket No. 2009-211-E, and Docket No. 2010-376-E. In those dockets, the Commission found, among other things, that the pricing and pricing terms of the EPC Contract are confidential, and issued a protective order barring the disclosure of such information. See e.g., Commission Order Nos. 2008-467; 2008-696, as amended by Order Nos. 2008-739; 2009-888, 2010-198 issued in Docket No. 2008-196-E; Commission Order No. 2009-401 issued in Docket No. 2009-211-E; Commission Order Nos. 2010-795, 2011-127, and 2011-177 issued in Docket No. 2010-376-E; and Commission Orders Nos. 2012-415, 2012-621 and 2012-623 issued in Docket No. 2012-203-E.

To this end, and in accordance with Commission Order No. 2005-226, dated May 6, 2005, in Docket No. 2005-83-A, enclosed with this letter is as follows:

- 1. A true and correct copy of the Confidential version of the Report in a sealed envelope marked "CONFIDENTIAL." The title page of the Confidential version of the Report is marked "CONFIDENTIAL VERSION" and each page of the Confidential version of the Report is marked "CONFIDENTIAL VERSION."
- 2. Ten copies of a redacted Public version of the Report.

In the event that anyone should seek disclosure of the unredacted Confidential version of the Report, SCE&G respectfully requests that the Commission notify SCE&G of such request and provide it and the Contractor with an opportunity to obtain an order from this Commission or a court of competent jurisdiction protecting the Confidential version of this document from disclosure.

POPE ZEIGLER

LAW FIRM

COLUMBIA | CHARLOTTE

The Honorable Jocelyn Boyd Public Service Commission of South Carolina May 13, 2013 page | 3

If you have any questions regarding these matters, please contact me.

Sincerely,

Por 7. Zeigler
Belton T. Zeigler

cc: C. Dukes Scott John Flitter

Shannon Bowyer Hudson, Esquire

K. Chad Burgess, Esquire



COLUMBIA | CHARLOTTE

RECEIVED

SC PUBLIC SERVICE

Belton T. Zeigler

Partner

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Pope Zeigler, LLC 1411 Gervais St., Ste 300 Post Office Box 11509 Columbia, SC 29211 popezeigler.com

May 13, 2013

C. Dukes Scott, Executive Director John Flitter, Director of Electric and Gas Regulation Shannon Bowyer Hudson, Esquire Office of Regulatory Staff 1401 Main Street, Suite 900 Columbia, SC 29201

Re:

Quarterly Report of SCE&G Concerning Construction of V.C. Summer Nuclear Station

Units 2 and 3

Dear Mr. Scott:

Enclosed please find South Carolina Electric & Gas Company's (the "Company" or "SCE&G") Quarterly Report (the "Report") for the period ending March 31, 2013, related to the construction of V.C. Summer Nuclear Station Units 2 and 3 (the "Units"). This Report is filed pursuant to the Base Load Review Act, S.C. Code Ann. § 58-33-277 (Supp. 2011) and the provisions of Order No. 2009-104(A) of the Public Service Commission of South Carolina (the "Commission").

Because the Report contains certain commercially sensitive information, SCE&G is filing both redacted (Public) and unredacted (Confidential) versions of this Report. For your convenience, SCE&G is providing two (2) copies of the Public version of this Report. In addition, we are providing you with ten (10) copies of the Confidential version of this Report. The Confidential version of this Report is being submitted to you pursuant to the Confidentiality Agreement entered into between ORS and SCE&G on July 21, 2009.

SCE&G submits that the information designated as confidential is entitled to protection from public disclosure under the S.C. Rules of Civil Procedure and is exempt from public disclosure under S.C. Code Ann. § 30-4-10, et seq. Accordingly, the Confidential version of this Report contains unredacted versions of **Appendix 2** and **Appendix 3** and is being provided to you pursuant to S.C. Code Ann. § 58-4-55(c) (Supp. 2012) such that ORS may fulfill its statutory obligation under S.C. Code Ann. § 58-33-277(B). SCE&G intends to file the Confidential version of this Report with the Commission and will seek an appropriate protective order.

POPE ZEIGLER

LAW FIRM

COLUMBIA | CHARLOTTE

C. Dukes Scott John Flitter Shannon Bowyer Hudson Office of Regulatory Staff March 13, 2013 page | 2

SCE&G looks forward to working with the ORS in its review and audit of this information. If you have any questions regarding these matters, please advise.

Sincerely,

Enclosures

The Honorable Jocelyn Boyd cc:

K. Chad Burgess, Esquire

V.C. Summer Nuclear Station Units 2 & 3

Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

Quarter Ending March 31, 2013

I. Introduction and Summary

A. Introduction

This quarterly report is submitted by South Carolina Electric & Gas Company (SCE&G or the Company) to the Public Service Commission of South Carolina (the Commission) and the South Carolina Office of Regulatory Staff (ORS). It is submitted in satisfaction of the requirements of S.C. Code Ann. § 58-33-277 (Supp. 2012) and the terms of Commission Order No. 2009-104(A). This report provides updated information concerning the status of the construction of V.C. Summer Nuclear Station (VCSNS) Units 2 & 3 (the Units) and provides the current capital cost forecasts and construction schedules for the Units as of the close of the quarter. In Order No. 2012-884 dated November 15, 2012, the Commission approved updated construction schedules for the Units. This report provides a comparison of the current schedules and forecasts against those approved in Order No. 2012-884.

B. Structure of Report and Appendices

The current reporting period is the quarter ending March 31, 2013. The report is divided into the following sections:

Section I: Introduction and Summary;

Section II: Progress of Construction of the Units;

Section III: Anticipated Construction Schedules;

Section IV: Schedules of the Capital Costs Incurred Including Updates to the

Information Required by S.C. Code Ann. § 58-33-270(B) (6) (the

Inflation Indices);

Section V: Updated Schedule of Anticipated Capital Costs; and

Section VI: Conclusion.

Appendices 1, 2, and 4 to this report contain detailed financial, milestone and other information updating the schedules approved by the Commission in Order No. 2012-

884. For reference purposes, **Appendix 3** provides a copy of the capital cost schedule for the project as approved in Order No. 2012-884. **Appendix 5** provides a listing of License Amendment Requests submitted to date.

A confidential and a public version of this report and its attachments are being provided. Unless otherwise specified, all cost information reflects SCE&G's share of the project's cost in 2007 dollars. Attached to the end of the report is a glossary of acronyms and defined terms used.

C. Construction Schedule and Milestones

As the report indicates, the Company has met all current construction milestones approved by the Commission in Order No. 2012-884, taking into account the contingencies authorized in Order No. 2009-104(A). There are 146 specific milestones for reporting purposes. As of March 31, 2013, 84 have been completed. Comparing the scheduled milestone completion dates as of the date of this report to the milestone completion dates approved by the Commission in Order No. 2012-884, the completion dates of 49 milestones have changed. Of these, 15 have been accelerated and 34 have been delayed for between one and 11 months.

D. Construction Costs and Cost Forecasts

Spending through December 31, 2013, in current dollars is forecasted to be approximately \$173 million below the capital cost schedule approved in Order No. 2012-884. The present cash flow forecast indicates that the Company will be able to complete the Units for \$4.548 billion in 2007 dollars, which is the amount approved in Order No. 2012-884. The current cost estimates include no cost changes apart from changes in timing of costs and minor shifts in costs among cost categories that occur in the normal course of managing the project.

In Order No. 2009-104(A), the Commission recognized that forecasts of Allowance for Funds Used During Construction (AFUDC) expense and escalation would vary over the course of the project and required those forecasts to be updated with each quarterly report. The current escalation indices were issued in May of 2013 for the period of July through December of 2012 and have been used in forecasting the construction costs for the project that are presented here.

Chart A below compares the current capital cost forecast to the forecast presented in the last quarterly report. This chart shows an increase in Gross Construction Costs of \$68.1 million over the life of the project. With each quarterly update, a quarter that had been subject to the five-year escalation rate becomes subject to the one-year rate. The figures reported on Chart A also include the effect of calculating escalation on an updated cash flow projection for the project.

Chart A: Re	conciliation	of	Capital	Cost	(\$000)

Forecast Item	Projected @ 3/31/13 (Five-Year Average Escalation Rates)	Projected @ 12/31/12 (Five-Year Average Escalation Rates)	Change
Gross Construction	\$5,765,835	\$5,697,773	\$68,062
Less: AFUDC	\$243,198	\$214,730	\$28,468
Total Project Cash Flow	\$5,522,637	\$5,483,043	\$39,594
Less: Escalation	\$974,232	\$934,638	\$39,594
Capital Cost, 2007 Dollars	\$4,548,405	\$4,548,405	\$0

Chart B compares the current forecast of gross construction costs, including current escalation, to the forecast on which the Commission relied in adopting Order No. 2012-884. Chart B shows that the forecasted capital cost of the Units in 2007 dollars has not changed. Due to the changes in forecasted escalation and AFUDC, see Section I. F, below, the cost of the plant in future dollars has increased by approximately \$11.3 million since Order No. 2012-884 was issued.

Chart B: Reconciliation of Capital Cost (\$000)

Forecast Item	Projected @ 3/31/13 (Five-Year Average Escalation Rates)	As Forecasted and Approved In Order 2012-884	Change
Gross Construction	\$5,765,835	\$5,754,565	\$11,270
Less: AFUDC	\$243,198	\$237,715	\$5,483
Total Project Cash Flow	\$5,522,637	\$5,516,849	\$5,788
Less: Escalation	\$974,232	\$968,444	\$5,788
Capital Cost, 2007 Dollars	\$4,548,405	\$4,548,405	\$0

Chart C below shows the current forecasts of the cost of the Units compared to the cost forecasts underlying the initial Base Load Review Act (BLRA) order, which was issued by the Commission in 2009, and the update orders that the Commission issued subsequently. The decline in capital cost forecasts in 2007 dollars between Order No. 2010-12 and 2011-345 reflects the removal of Owner's contingency amounts from the forecasts as required by the opinion of the Supreme Court of South Carolina in South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm'n, 388 S.C. 486, 697 S.E.2d 587 (2010). This chart shows that while the cost of the project in 2007 dollars has increased by \$13 million since the initial forecasts, the cost of the project in future dollars is approximately \$547 million below the initial forecast.

Forecast Item	Order No. 2009-104(A)	Order No. 2010-12	Order No. 2011-345	Order No. 2012-884	Projected @ 03/31/2013
Capital Cost, 2007 Dollars	\$4.535	\$4.535	\$4.270	\$4.548	\$4.548
Escalation	\$1.514	\$2.025	\$1.261	\$0.968	\$0.974
Total Project Cash Flow	\$6.049	\$6.560	\$5.531	\$5.517	\$5.523
AFUDC	\$0.264	\$0.316	\$0.256	\$0.238	\$0.243
Gross Construction	\$6.313	\$6.875	\$5.787	\$5.755	\$5.766

E. Escalation Rates

As provided in Order No. 2009-104(A), the most current one-year inflation indices are used to escalate costs occurring in the twelve-month period after the date of each quarterly report. The most current escalation indices are found in the Handy-Whitman January 2013 update which was issued in May 2013 and reports data for the period July through December of 2012. Those rates are reflected in this report. The approved capital cost targets have been adjusted to reflect the currently reported historical escalation rates. The forecasted costs provided here reflect SCE&G's calculations related to the WEC/CB&I Claims, which change the index applicable to Firm with Indexed Adjustment

cost categories going forward from a floating Handy-Whitman adjustment to a fixed rate for the life of the project.

As shown on **Appendix 4**, utility construction cost escalation rates were at historically high levels during the period 2005-2008, and since then have dropped. Current escalation rates are shown below on **Chart D**. When compared to the previous Handy-Whitman release, the current update shows an upward trend in one-year average rates and a downward trend in five-year average rates.

Chart D: Handy-Whitman Escalation Rates

Escalation Rate Comparison				
	Jan-Jun 2012	Jul-Dec 2012		
HW All Steam Index:				
One-Year Rate	1.92%	4.84%		
Five-Year Average	3.60%	3.25%		
Ten-Year Average	4.67%	4.95%		
HW All Steam/Nuclear Index:				
One-Year Rate	2.10%	5.19%		
Five-Year Average	3.64%	3.32%		
Ten-Year Average	4.70%	4.99%		
HW All Transmission Plant Index:				
One-Year Rate	(0.17)%	3.29%		
Five-Year Average	2.56%	2.10%		
Ten-Year Average	4.71%	4.90%		

F. AFUDC

The AFUDC for the project is currently projected to be approximately \$5.5 million higher than the forecast on which Order No. 2012-884 was based. Consistent with Order No. 2009-104(A), SCE&G computes AFUDC based on the Federal Energy Regulatory Commission (FERC) approved methodology as applied to the balance of Construction Work in Progress (CWIP) that is outstanding between rate adjustments. SCE&G's projected AFUDC rate is currently 6.09%, compared to the rate of 5.28% that applied when Order No. 2012-884 was issued.

G. Compliance with the Commission Approved Cumulative Project Cash Flow Target

The current Cumulative Project Cash Flow target for the project was adopted by the Commission in Order No. 2012-884. In Order No. 2009-104(A), the Commission provided that the applicable Cumulative Project Cash Flow target would be adjusted with each quarterly report to reflect updated escalation data.

Appendix 2 provides the Commission-approved Cumulative Project Cash Flow target updated for current escalation data. The cash flow targets through December of 2012 have been updated to reflect actual escalation rates. The cash flow targets for the first quarter of 2013 and beyond have been updated based on the most recently available inflation indices, which for purposes of this report, are the indices provided in May of 2013 that report data for the period July through December of 2012. When final actual indices for 2013 become available, the cash flow data for 2013 will be revised to reflect the actual escalation rates.

Appendix 2 compares the approved Cumulative Project Cash Flow target to the current cumulative cash flow schedules for the project, which include actual costs where available and SCE&G's working forecasts of annual cash flows for future years. In addition, the project cash flow targets presented on Appendix 2 for 2012 have been adjusted to reflect timing differences between the billing methodology under the Engineering, Procurement and Construction Agreement (EPC Contract) and the calculation of the escalated cash flow targets under Order No. 2009-104(A). Under the EPC Contract, for periods where actual escalation rates are not available, WEC/CB&I bills SCE&G based on a rolling 2-year average of the applicable Handy-Whitman rate and provides adjustments to reflect the actual rate when it is known. An adjustment has been made to Appendix 2 target calculations to offset the timing differences that arise as a result of WEC/CB&I's approach to estimated billings and credits. This adjustment applies to those EPC Contract cost categories that are subject to indexed escalation.

II. Progress of Construction of the Units

A. Construction

The project continues to maintain an excellent safety record that exceeds industry expectations for projects of comparable size.

1. Unit 2 Nuclear Island (NI) Basemat

On March 11, 2013, the project team successfully completed the placement of the Unit 2 NI basemat which forms the foundation for the NI. The placement required just over 50 hours of continuous production of concrete by the on-site

batch plants and the uninterrupted placement of 7,200 cubic yards of concrete. The compliance of the concrete to quality specifications was monitored throughout the placement. Only 1.9% of the concrete delivered was rejected as not within specification as initially delivered.

2. Unit 2 Turbine Building Basement

During the reporting period, the project team began to form and place concrete walls for the Unit 2 Turbine Building Basement. At the close of the period, approximately 50% of the Unit 2 Turbine Building Basement walls were complete.

3. Unit 3 NI Mudmat

During the reporting period, the geological mapping of the Unit 3 excavation was completed and leveling concrete and the lower mudmat were placed for the Unit 3 NI. The waterproof membrane has recently been installed over the lower mudmat in preparation for placing the upper mudmat.

4. Unit 2 Main Condenser Assembly

During the period, substantial progress was made in fabricating the Unit 2 Main Condenser Assembly. By the end of the reporting period, more than 1,800 linear feet or 40% of the welding required to complete the condenser had been performed.

5. Unit 2 CR10 and Containment Vessel Bottom Head

During the reporting period, CB&I completed fabrication of Unit 2 CR10 module, which is the steel framework that will be set on the basemat to support the Containment Vessel Bottom Head (CVBH). The CVBH is the steel bowl that forms the base of the Containment Vessel (CV). In April 2013, CR10 was lifted and set in place on the NI basemat using the Bigge Heavy Lift Derrick.

CB&I has finished fitting together and welding the plates that form the Unit 2 CVBH and is currently placing rebar to support future concrete placement beneath and within the CVBH. Work is progressing on the concrete pedestal at the center of CR10 on which the CVBH will rest. Preparations are being made to place the CVBH on the CR10 in the May/June 2013 period.

The steel plates for the Unit 3 CVBH have been received on site. Preassembly work for the Unit 3 CVBH is underway.

6. CV Rings

Fabrication of Unit 2 CV Ring 1 is nearing completion. The four courses of plates required to form CV Ring 1 have been fitted and welded together. CB&I is now welding equipment and access hatches, stiffeners, cable penetration fittings, and other fittings to the ring. CB&I has begun Unit 2 CV Ring 2 assembly. During the reporting period, CB&I completed fitting up and welding the first two courses of plates that will form Ring 2.

The individual welds on the Units 2 and 3 CVBH and CV Rings are subject to radiographic testing for quality. Overall acceptance rates are above 99%.

7. Fabrication of Sub-Modules

Fabrication of sub-modules at the CB&I Lake Charles (CB&I-LC) facility continues to be delayed due to issues at the facility. CB&I-LC was formerly known as Shaw Modular Solutions (SMS). The schedule for fabrication and delivery of sub-modules from CB&I-LC remains a focus area for the project. SCE&G continues to devote resources to monitor this area due to its potential to affect the construction schedule. The sub-module delays are discussed further in Section II.B.10.

8. Cooling Towers

By the end of the reporting period, approximately 45% of the precast panels that make up Cooling Tower 2A had been set in place. Fans and fan shrouds were being installed. The setting of precast panels had also begun for Cooling Tower 3A. The backfilling of the Cooling Tower 2B foundation was complete. The initial foundation piles for Cooling Tower 2B had been driven. Driving of piles for the Unit 3 Pump Structure was more than 90% complete. The basin, pads and internal circulating water pipe for Cooling Tower 3B were completed during the reporting period and the Cooling Tower 3B site was ready for turnover to Evaptech for erection of the Cooling Tower structure. Work on the Unit 2 Pump Structure will begin later in the year.

9. Switchyard

The functional tests and walkdowns of the Switchyard as constructed were completed in January. The Switchyard was turned over to SCE&G's transmission department for operation.

10. Workforce

The project continues to recruit and utilize the majority of construction employees from a skilled craft workforce in the state of South Carolina. More than half of these local workers are from Fairfield, Lexington, Richland, and Newberry counties. CB&I plans to employ approximately 3,000 - 3,500 employees throughout the duration of the project, with these numbers fluctuating during the various phases of construction activity.

B. Equipment and Fabrication

1. The Reactor Vessel and Closure Head

The Unit 2 Reactor Vessel and Closure Head have successfully completed hydrostatic testing at the Doosan manufacturing facility in South Korea. They have been packaged and are awaiting shipment to the United States. Their departure will be scheduled pending successful delivery of the Reactor Vessel for the Vogtle Unit 3 by rail to the Vogtle site. Delivery of the Unit 2 Reactor Vessel and Closure Head was rescheduled to allow for modifications to the articulated Schnabel rail car that will be used to transport the reactor vessel to the site. Modifications to the Schnabel car were necessary to address concerns that arose during its first-time use in shipping an AP1000 reactor vessel to the Vogtle site. The VCSNS Unit 2 Reactor Vessel and Closure Head are expected to be delivered to the site in late June or early July 2013.

Machining, cladding and welding of components of the Unit 3 Reactor Vessel are underway at Doosan's foundry in South Korea.

2. Steam Generators

During the period, the Unit 2 Steam Generator A and Steam Generator B satisfactorily completed primary and secondary hydrostatic tests at the Doosan manufacturing facilities in South Korea. At the close of the period, Steam Generator A was undergoing final inspection and packaging. Post-hydrostatic testing work on Generator B was being completed in preparation for final inspection and packaging for shipment.

3. Core Make-Up Tanks

In November of 2012, the two Unit 2 Core Make-Up Tanks completed successful hydrostatic testing at Mangiarotti's manufacturing facilities in Italy. Final reviews of the Quality Assurance (QA) data packages for the tanks are underway in preparation for shipping them to the site in the second quarter of 2013. The Unit 3 Core Make-Up Tanks are in fabrication at those facilities.

4. Accumulator Tanks

The Unit 2 Accumulator Tanks have undergone successful hydrostatic testing at Mangiarotti's manufacturing facilities in Italy. Coating activities were begun in March of 2013. The final review of the QA data package for the Unit 2 Accumulator Tanks is underway in preparation for shipment to the site in the second quarter of 2013. The Unit 3 Accumulator Tanks are in fabrication at those facilities.

5. Deaerator and Moisture Separator Reheaters

The Unit 2 Deaerator and Moisture Separator Reheaters have been completed and tested and are in transit to the site. The Unit 3 Deaerator is in fabrication at the manufacturing facilities of Sungjin Geotec Co., Ltd in South Korea. The Unit 3 Moisture Separator Reheaters are in fabrication at the TEi manufacturing facilities in Oklahoma.

6. Reactor Coolant Loop Piping (RCL)

The Unit 2 RCL surge lines have been received on site. The Unit 2 RCL cold and hot legs manufactured by Tioga are currently awaiting installation of fittings and instrumentation access points and other welding activities at the Carolina Energy Solutions (CES) facility in Rock Hill. The technique used at the Tioga manufacturing facility for measuring the bend radius for these pipes is different from the technique used at CES. This difference has required that the work at CES be put on hold pending review of the proper placement of the instrumentation ports. Resolution of this issue is anticipated during the first half of 2013 with no impact foreseen to the as-needed date for these components.

Unit 3 RCL hot legs are undergoing machining at the manufacturing facilities of Tioga's sub-supplier, IBF, in Italy. Unit 3 RCL cold legs and surge lines were originally manufactured for use in Unit 2 but were rejected due to failure to meet Westinghouse (WEC) piping specifications for grain size. Grain size deviations can affect the ability to inspect the RCL piping ultrasonically. When the Units are in service, periodic ultrasonic inspection of the RCL piping will be required for verification of the condition of piping welds. Further review of the

issue has determined that grain size deviations do not impact the form, fit or function of the piping or the ability to perform adequate ultrasonic inspections. The evaluation necessary to authorize the deviation from grain size specification was completed during the review period. Final fabrication work on the Unit 3 RCL cold leg piping and surge lines is now underway.

7. Reactor Coolant Pumps (RCP)

RCP manufacturing is progressing well without significant issues at Curtiss-Wright EMD's facility in Pennsylvania.

8. Turbine Generator

Fabrication of the Unit 2 Turbine Generator is progressing well without significant issues at Toshiba's manufacturing facilities in Japan. Turbine generator components such as feedwater heaters were delivered to the site during the reporting period.

9. Squib Valves

The assembly and testing of squib values for both Units have been completed and data packages for the valves are being assembled at SPX's manufacturing facilities in Pennsylvania. Shipment of the valves is currently on hold to allow SPX with WEC's assistance to analyze and address anomalies uncovered during the qualification testing required for AP1000 squib valves. SCE&G has monitored WEC's and SPX's evaluations and their plans to ensure the valves will perform their design basis functions. Work is progressing to resolve these issues and they are not expected to impact site construction.

10. CB&I-LC Construction Module Fabrication

Challenges related to fabrication of sub-modules at the CB&I-LC facility continue to be a focus area of the project.

Transition to CB&I Ownership of SMS. As a result of its acquisition of the Shaw Group and SMS, the CB&I leadership team has instituted a review of the fabrication schedule and processes at CB&I-LC. CB&I has also begun evaluating alternative vendors for certain scopes of work. As previously reported, the responsibility for manufacturing shield building structural modules has been assigned to Newport News Industries (NNI) which is preparing to fabricate those modules. During the reporting period, mock-ups of certain sub-modules have been received on site from NNI to support testing of concrete placement in constrained areas.

CB&I currently requires that CB&I-LC obtain specific review and concurrence from CB&I before it releases structural sub-modules for transportation to the site. This review process involves as-built verification of component installation in the sub-modules and final module walkdown by CB&I personnel. Restrictions on coating and product testing remain in place. SCE&G maintains a presence on site to monitor activities at CB&I-LC and interact with CB&I-LC leadership on a regular basis.

WEC/CB&I is undertaking a review of the design interface between WEC and CB&I-LC to ensure that design requirements are properly communicated and followed.

Notice of Violation. On April 19, 2013, after the close of the reporting period, the Nuclear Regulatory Commission (NRC) issued a notice of violation and proposed a civil penalty of \$36,400 against CB&I for discrimination by SMS against an employee who raised a safety concern. The safety concerns did not involve this project. The events underlying the citation occurred before CB&I acquired SMS. In a separate order issued that same day, the NRC requested CB&I take action to improve the nuclear safety culture at CB&I-LC particularly with respect to policies and organizational structure to support the reporting of nuclear safety concerns by CB&I-LC workers.

Shear Stud Spacing. As previously reported, the NRC completed an Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) inspection at SMS in May 2012. The inspection resulted in the NRC debriefing an Unresolved Item (URI) for deviations from Design Control Document (DCD) provisions primarily related to module shear stud spacing. During the NRC's 2012 Third Quarter Exit meeting conducted on October 9, 2012, the NRC resolved the previous URI as a NRC-identified Green violation. A "Green" violation is a finding of very low safety significance.

The issue raised by the NRC involved changes to shear stud minimum and maximum spacing allowances where shear studs had to be relocated due to obstructions within the module walls. In response, WEC has developed a revision to the Updated Final Safety Analysis Report (UFSAR) clarifying the licensing commitment concerning shear stud spacing where changes in spacing are indicated as a result of obstructions. A License Amendment Request (LAR) package is being prepared to request NRC authorization to make this change. If the LAR is approved, the specific instances where shear stud spacing must be altered would be addressed on a case by case basis in accordance with the revised UFSAR.

Fillet Welds. During the third quarter of 2012, WEC identified an issue related to use of fillet welds in lieu of full penetration welds for several CA20 submodules which are now on site. As a result of a WEC design review, WEC determined that the fillet weld process was not reflected in the licensing basis drawings for these components. CB&I contractors on site are preparing to remove the fillet welds to allow rewelding using full penetration welds.

Conclusion. The delays related to fabrication of the sub-modules at CB&I-LC continue to be an important area of focus for the project. At the end of the reporting period, 40 of the 72 required CA20 sub-modules had been delivered to the site. All remaining CA20 sub-modules are in fabrication at CB&I-LC as are the eight sub-modules comprising CA-05. Twenty-one CA-01 modules are in fabrication.

Senior management from both SCE&G and WEC/CB&I continue to monitor the fabrication and delivery process related to sub-modules. WEC personnel provide on-site engineering support for production at CB&I-LC. SCE&G continues to maintain a resident inspector at the CB&I-LC facility who provides additional monitoring.

C. Licensing and Permitting

As licensee for the Units, SCE&G is directly accountable to the NRC for its contractors meeting nuclear safety-related Quality Assurance/Quality Control (QA/QC) requirements both at the project site and at the facilities of its component manufacturers and equipment suppliers worldwide. WEC/CB&I through the EPC Contract is responsible to SCE&G for making sure that these requirements are met.

1. NRC Inspections

The NRC completed the following inspections at the project site:

- a) The NRC conducted multiple inspections of the as-built condition of the Unit 2 NI basemat rebar cage prior to the placement of concrete and continued the on-site inspection during the placement of concrete. On March 26, 2013, the NRC exited its Unit 2 Basemat Concrete Placement and Pre-Placement Inspection. Two minor violations were debriefed neither of which had any impact on the actual construction of the basemat rebar cage or the conduct and sampling of the concrete placement.
- b) On March 26, 2013, the NRC issued its report related to its 2012 inspection of the concrete reinforcement in the basemat. In that inspection, the NRC had found that the techniques employed in fabricating the steel rebar

cages for the basemat did not fully comply with applicable sections of the American Concrete Institute (ACI) Construction Code that were referenced in the UFSAR.

In its March 26, 2013 report, the NRC documented a preliminary finding of White safety significance related to reinforcing steel spacing and development length in some areas of the NI. The NRC rates the safety significance of its findings as Green, White, Yellow, and Red in order of increasing severity. A White finding is considered to be of low to moderate safety significance. Qualitatively, it indicates an acceptable level of performance by the licensee, but is outside the nominal risk range.

SCE&G requested a Regulatory Conference with the NRC to discuss the safety significance of this violation which was held on April 30, 2013. SCE&G presented facts in an attempt to show that the proper safety significance of this event should be Green (*i.e.*, of very low safety significance.) SCE&G anticipates that the NRC will issue a final decision on this matter in June 2013.

- c) On January 10, 2013, the NRC completed the CV Ring No. 1 welding inspection with no findings identified.
- d) In November of 2012, the NRC conducted its inspection of the Corrective Action Program (CAP) employed by SCE&G and WEC/CB&I. Based on SCE&G's responses to that report, the NRC approved the CAP presently in place for SCE&G and the Consortium subject to the completion of the NRC end of cycle performance review of VCSNS Units 2 & 3. The NRC staff may now issue non-cited violations in reliance on correction of those issues through the CAP program in lieu of issuing severity level IV or Green violations.

2. LARs

The NRC approves changes from the approved licensing basis for nuclear units through the LAR request and review process. SCE&G envisions that filings for LARs will be a normal part of the construction program for the Units going forward under the Combined Operating License (COL). Additionally, if needed, a licensee can submit a Preliminary Amendment Request (PAR) associated with a LAR. Through the PAR process the licensee can request a notification that the NRC does not object to the licensee installing and testing the proposed changed design feature, at the licensee's risk, pending NRC's review of the LAR.

During the first quarter of 2013, SCE&G filed ten LARs with the NRC, two of which (LARs 13-01 and 13-02) were discussed in the Quarterly Report for the Fourth Quarter of 2012. For ease of reference, a report that tabulates all the LARs filed as of March 31, 2013 is attached as **Appendix 5**. SCE&G has withdrawn LAR

13-08 in anticipation of filing a substitute LAR which will specify areas within the design of structural modules where obstructions necessitate alternative spacing for shear studs or trusses and will more clearly define the design requirements for placement of shear studs and internal trusses within these areas.

3. NRC Response to the Japanese Earthquake and Tsunami of March 2011

As previously reported, on October 22, 2012, SCE&G issued its initial status report to the NRC in response to license condition 2.D(13) which relates to restoring core cooling after a beyond design basis accident. In this status report, SCE&G summarized those actions both taken and planned to comply with license condition 2.D(13). At this time, SCE&G is preparing an integrated response plan to submit to the NRC in compliance with license condition 2.D(13) for Units 2 & 3. The plan for Unit 1 was completed in the third quarter of 2012.

NRC Order EA-12-063 relates to spent fuel pool instrumentation issues raised by the Fukushima event. On October 29, 2012, SCE&G issued a technical report to the NRC which provides a complete response to the issues raised in Order EA-12-063. At the close of the reporting period, SCE&G was still awaiting the NRC response to its request to close out Order EA-12-063 on the basis of that technical report.

4. Major Construction Permits

a) Other Major Construction-Related Permits

No other major construction-related permits are outstanding. Other construction-related permits are anticipated to be obtained in the ordinary course of administering the project.

5. BLRA Regulatory Proceedings

As reported in the Quarterly Report for the Fourth Quarter of 2012, in May of 2012, SCE&G filed a petition for updates to the capital cost schedules and construction schedules for the Units as approved under the BLRA. On November 15, 2012, the Commission issued Order No. 2012-884 finding that the revisions were prudent under S.C. Code Ann. § 58-33-270(E). The only exception was that the Commission determined that approval of the costs associated with Phase II of the change order addressing Cyber Security upgrades to the Units, in the amount of \$4.95 million, was premature since the precise scope of Phase II work will not be determined until the evaluation and work plan created in Phase I is completed. The Commission did not suggest that these costs could not be recovered and indicated that the Company may seek to include them within its approved capital cost schedules when they are more fully known.

Two intervenors filed petitions for re-hearing concerning Order No. 2012-884. The Commission denied those petitions by Order No. 2013-5, dated February 14, 2013. The intervenors have filed notices of appeal to the Supreme Court of South Carolina. The briefing of these appeals is expected to take place over the summer of 2013.

D. Engineering

1. Engineering Completion Status

As of March 31, 2013, the Units 2 & 3 plant design issued to support construction is 76% complete. The 'issued to support construction' metric is now the principal metric of design completion for the project.

2. Site Specific Design Activities

Site specific design work is ongoing in support of site specific systems, to include the Circulating Water System (CWS), Yard Fire System (YFS), Potable Water System (PWS), Construction and Offsite Power System (ZRS), Raw Water System (RWS), Sanitary Drain System (SDS), Offsite Water System (OWS) and Waste Water System (WWS).

As discussed in previous reports, the presence of bromides in the Broad River system resulted in redesign of the OWS using reverse osmosis to achieve South Carolina Department of Health and Environmental Control (SCDHEC) potable water requirements. SCE&G is reviewing initial documentation related to this redesign as provided by WEC/CB&I.

E. Training

- 1. The schedule for implementation of the Plant Reference Simulator (PRS) continues to support the schedule for training and licensing reactor operators as required to allow the initial fuel load for Unit 2. WEC has assembled four teams to oversee validation and testing of the PRS. Continuous monitoring and regular status updates are ongoing to ensure that the timetable for the NRC's certification of the PRS is consistent with the required training schedule for reactor operators. The validation and testing of the PRS will remain an area of continued focus for the project given the importance to the project of meeting the reactor operator training schedule.
- 2. Twenty-four students continue in the Initial Licensed Operator (ILO) class. The duration is approximately two years and will culminate with an NRC written exam in August 2014 and a simulator demonstrative exam in December 2014. Eighteen students are enrolled in the Non-Licensed Operator (NLO) program and will complete the program in July 2013. A second NLO class will begin in August 2013.
- 3. The Tri-Party Agreement that is in negotiation between Southern Nuclear Company (SNC), SCE&G and WEC is on hold pending resolution of intellectual property issues. The agreement concerns collaboration related to the development of programs and procedures for operating AP1000 reactors. Work is continuing on these issues, and limited collaboration is occurring based on prior agreements.

F. Change Control/Owners Cost Forecast

1. Change Order 16. Change Order No. 16 will incorporate the agreement entered into between SCE&G and WEC/CB&I resolving the WEC/CB&I claims related to COL Delay, Shield Building Redesign, Module Redesign, and Unit 2 Rock Conditions. The language of Change Order No. 16 is still being negotiated.

G. Transmission

- 1. VCS1-Killian 230 kV Line By Order No. 2011-978, the Commission approved the siting of the VCS1-Killian 230 kV Line under the South Carolina Utility Facility Siting and Environmental Protection Act. In early January 2012, SCE&G began construction on the VCS1-Killian 230 kV Line. As of March 31, 2013, approximately ninety-five percent (95%) of the VCS1-Killian 230 kV Line is complete.
- 2. VCS2-Lake Murray 230 kV Line No. 2 and Segment of the VCS2-St. George 230 kV Line No. 1 Order No. 2011-978 also approved the siting of VCS2-Lake Murray 230 kV Line No. 2, and a segment of the VCS2-St. George 230 kV Line No. 1 which extends from V.C. Summer Switchyard #2 to the Lake Murray 230/115 kV Substation. In May 2012, SCE&G began construction on these lines. As of March 31, 2013, construction of these two lines is approximately sixty percent (60%) complete.
- 3. The Remaining Segment of VCS2-St. George 230 kV Line No. 1 and the VCS2-St. George 230 kV Line No. 2 On September 26, 2012, by Order No. 2012-730 the Commission approved the siting of the remaining segment of VCS2-St. George 230 kV Line No. 1 and the VCS2-St. George 230 kV Line No. 2 under the South Carolina Utility Facility Siting and Environmental Protection Act. These lines are being built on existing right of way corridors. Construction of these lines has not yet begun.
- **4. St. George Switching Station** In Order No. 2012-730, the Commission also issued a Certificate of Environmental Capability and Public Convenience and Necessity authorizing construction of this switching station. The site for it was purchased in 2009. Construction of the switching station has not begun.
- 5. Saluda River Substation On December 20, 2012, SCE&G secured the rights to the site for the new Saluda River 230/115 kV Substation. The site is adjacent to the corridor for the St. George lines and one of the St. George 230 kV lines will fold into this new substation when it is built. In Order No. 2012-730, the Commission issued a Certificate of Environmental Capability and Public Convenience and Necessity authorizing construction of the new substation. Lay out of the substation is progressing.

III. Anticipated Construction Schedules

As of March 31, 2013, the Company and its contractors remain on schedule to complete all required milestones as adjusted pursuant to the milestone schedule contingencies approved by the Commission in Order No. 2009-104(A). Each of those adjustments is itemized in the BLRA Milestone section that follows. Accordingly, the project is in compliance with the updated construction schedules approved by the Commission in Order No. 2012-884 and with the provisions of S.C. Code Ann. § 58-33-275(A)(1).

A. Construction Schedule

The Project Licensing and Permitting, Engineering, Procurement and Construction work remains on schedule to meet the Units' Substantial Completion Dates taking into account the schedule contingencies approved in Order 2009-104(A).

B. BLRA Milestones

Appendix 1 to this quarterly report lists and updates each of the specific milestones constituting the anticipated construction schedule for the Units pursuant to S.C. Code Ann. § 58-33-270(B)(1) and Order No. 2012-884. Comparing the current milestone target completion dates to the dates in Order No. 2012-884, 15 milestones have been accelerated and 34 have been delayed.

IV. Schedules of the Capital Costs Incurred Including Updates to the Information Required by S.C. Code Ann. § 58-33-270(B) (6) (the Inflation Indices)

The Capital Costs section of this report (Section IV.A) provides an update of the cumulative capital costs incurred and forecasted to be incurred in completing the project. These costs are compared to the cumulative capital cost targets approved by the Commission in Order No. 2012-884. The approved capital cost targets have been adjusted to reflect the currently reported historical escalation rates. There has not been any use by the Company of the capital cost timing contingencies that were approved by the Commission in Order No. 2009-104(A). The Inflation Indices section (Section IV.B) of this report provides updated information on inflation indices and the changes in them.

A. Capital Costs

Appendix 2 shows the Cumulative Project Cash Flow target as approved in Order No. 2012-884 and as updated for escalation and other Commission approved adjustments under the heading "Per Order 2012-884 Adjusted."

Appendix 2 also shows the cumulative cash flow for the project based on actual expenditures to date and the Company's current forecast of cost and construction schedule under the heading "Actual through March 2013 plus Projected."

As shown on **Appendix 2**, the projected expenditure for the project for the 12 months ended December 31, 2013, is approximately \$928 million. As shown on **Appendix 2**, line 39, the cumulative amount projected to be spent on the project as of December 31, 2013, is approximately \$2.701 billion. As shown on **Appendix 2**, line 18, the Cumulative Project Cash Flow target approved by the Commission for year-end 2013 adjusted for current escalation and WEC/CB&I billing differences is approximately \$2.878 billion. As a result, the cumulative cash flow at year-end 2013 is projected to be approximately \$176.7 million less than the target.

For comparison purposes, **Appendix 3** sets out the cash flow schedule for the project as it was approved in Order No. 2012-884. **Appendix 3** does not include any adjustments to the cash flow schedule for changes in inflation indices or adjustments in capital cost schedules made by the Company. The AFUDC forecast presented on **Appendix 3** is the AFUDC forecast that was current at the time of Order No. 2012-884.

B. Inflation Indices

Appendix 4 shows the updated inflation indices approved in Order No. 2009-104(A). Included is a history of the annual Handy-Whitman All Steam Index, South Atlantic Region; the Handy-Whitman All Steam and Nuclear Index, South Atlantic Region; the Handy-Whitman All Transmission Plant Index, South Atlantic Region; and the Chained GDP Index for the past 10 years. The changes in these indices and the escalation-related effects of cost rescheduling resulted in a decrease in the projected cost of the Units in future dollars from \$6.3 billion as forecast in Order No. 2009-104(A) to a forecast of \$5.8 billion using current inflation data.

V. Updated Schedule of Anticipated Capital Costs

The updated schedule of anticipated capital costs for Units 2 & 3 is reflected in **Appendix 2.**

VI. Conclusion

The Units are currently anticipated to be completed at a cost of approximately \$4.5 billion in 2007 dollars. The Company maintains a staff that monitors the work of its contractors and continues to monitor closely areas of concern related to either cost or schedule for the project. The Company will continue to update the Commission and the ORS of progress and concerns as the project proceeds.

Acronym or Defined Term	Reference
7Q10	A standard low-water flow condition used for evaluating the environmental effects of discharges and withdrawals from rivers and streams. The conditions are calculated to reflect the lowest average 7-day flow expected to be encountered during any 10-year period.
ACI	American Concrete Institute.
AFUDC	Allowance for Funds Used During Construction.
AP1000	The WEC designed Advanced Pressurized water nuclear reactor of approximately 1000 megawatts generating capacity.
APOG	A group of utilities who have submitted applications for AP1000 COLs.
BLRA	The Base Load Review Act, S.C. Code Ann. § 58-33-210 et seq. (Supp. 2009).
CA	The designation for a specific pre-fabricated construction module that forms part of the reactor building, such as Module CA20.
CAP	Corrective Action Program.
CAR	A Corrective Action Report related to design, engineering or construction of the Units, or related processes, that must be corrected.
CB&I	Chicago Bridge & Iron, a sub-contractor on the project which upon acquisition of the Shaw Group became a member of the Consortium and a prime contractor on the project.
CB&I-LC	CB&I Lake Charles - the module fabrication unit formerly known as Shaw Modular Solutions or SMS and located in Lake Charles, Louisiana.
CES	Carolina Energy Solutions, a subcontractor located in Rock Hill, South Carolina.
COLs	Combined Operating Licenses for construction and operation of a nuclear unit issued by the NRC.
COLA	A Combined Operating License Application.
Commission	The Public Service Commission of South Carolina.
Consortium	The joint venture between WEC Electric Company, LLC and CB&I to construct the Units under the terms of the EPC Contract.
CR	A Condition Report communicating and memorializing concerns with the design, engineering or construction of the Units, or related processes, which report in some cases can become the basis for a Corrective Action Report.
CV	The Containment Vessel which provides containment for the reactor vessel and associated equipment.
CVBH	The Containment Vessel Bottom Head that forms the bottom of the Containment Vessel.
CWIP	Construction Work in Progress.
CWS	The Circulating Water System –the system that will transport waste heat from the turbines to the cooling towers.
Cyber Security	Technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.
DCD	Design Control Document which is approved by the Nuclear Regulatory Commission and sets forth the approved design of a nuclear reactor.
Departures	Departures are minor deviations from the approved Design Control Document included in the licensing basis for the Units that do not rise to the level requiring a License Amendment Request (LAR).

Acronym or Defined Term	Reference
EMD	Electro-Mechanical Division of Curtiss-Wright Corp., the sub-contractor for the Reactor Coolant Pumps.
EPA	The United States Environmental Protection Agency.
EPC Contract	The Engineering, Procurement and Construction Agreement for construction of the Units entered into by SCE&G and WEC/CB&I.
Exit Debriefing	A meeting held between the NRC and the licensee at the conclusion of an NRC inspection to discuss the results of the inspection.
FEIS	A Final Environmental Impact Statement as required by the National Environmental Policy Act of 1969.
FERC	The Federal Energy Regulatory Commission.
FFD	Fitness For Duty, a program that seeks to provide reasonable assurance that site personnel are trustworthy, will perform their tasks in a reliable manner, and are not under the influence of substances or otherwise impaired in a way that may adversely affect their ability to safely and competently perform their duties.
Fixed/Firm	Prices under the EPC Contract which are either fixed or are firm but subject to defined escalation rates.
FLEX	A diverse, flexible strategy led by NEI for adding more backup systems to cool nuclear reactors and used fuel storage pools and to maintain the integrity of reactor containment structures in response to lessons learned from Fukushima.
FNTP	Full Notice to Proceed authorizing all remaining safety-related work to commence.
FSAR	Final Safety Analysis Report – a report by the applicant providing support to the NRC's approval and certification of the standard power plant design.
GDP	Gross Domestic Product.
HFE/ISV	Human Factors Engineering/Integrated Systems Validation –part of the development of a training simulator for the Units.
HL or Hot Leg	That part of the Reactor Cooling Loop that transports steam to the steam generators.
HLD	Heavy Lift Derrick - the derrick that was erected on site to move large modules and equipment.
IBF	Subcontractor of Tioga that manufactures the Reactor Coolant Loop piping.
IFC	Issued for Construction – engineering drawings that include information necessary for construction of specific structures, systems and components.
ILO	Initial Licensed Operator.
INPO	Institute of Nuclear Power Operations.
IPS	Integrated Project Schedule for licensing and construction of the Units.
ITAAC	Inspections, Tests, Analyses, and Acceptance Criteria which are the inspections, tests, analyses and acceptance criteria that the NRC has determined to be necessary and sufficient to demonstrate that a nuclear unit has been constructed and will operate in conformity with the COLs, the Atomic Energy Act of 1954, as amended, and the NRC's regulations.
LAR	License Amendment Request – A formal request made by VCSNS to amend the combined operating license, its appendices, or its associated bases.
LNTP	Limited Notice to Proceed authorizing a vendor to commence specific work.
LSS	Limited Scope Simulator –a training simulator with limited functionality that can be used for the initial stages of operator training.

Acronym or Defined Term	Reference
MAB	Module Assembly Building - a building on site where large modules will be constructed and equipment will be prepared for installation in a space that is protected from the elements.
Near Term Task Force	A senior level task force created by the NRC to address lessons learned from the 2011 earthquake and tsunami in Fukushima, Japan with operating nuclear plants and new reactor applicants.
NEI	Nuclear Energy Institute.
Nelson Studs	Metal studs used in composite construction to secure concrete to steel components. The studs project out of the steel components and are surrounded by the concrete when it is poured.
NI	Nuclear Island, comprising the steel containment vessel, the reactor building, and the auxiliary building.
NLC	Nuclear Learning Center - a training facility operated by SCE&G at the Jenkinsville site.
NLO	Non-Licensed Operator.
NND	The New Nuclear Deployment Team within SCE&G.
NNI	Newport News Industries - a module fabrication subcontractor to WEC/CB&I.
NPDES	National Pollutant Discharge Elimination System.
NRC	The United States Nuclear Regulatory Commission.
ORS	South Carolina Office of Regulatory Staff.
OWS	Off Site Water System – the system that withdraws water from Monticello Reservoir and provides potable and filtered water for the Units.
PAR	Preliminary Amendment Request - A formal request made by VCSNS which allows VCSNS to proceed at its own risk with work consistent with an amendment request contained in an LAR prior to approval.
Pike	Pike Energy Solutions, a contractor for transmission and switchyard related work.
PRA	Probabilistic Risk Assessment.
PRHR	The Passive Residual Heat Removal Exchanger unit –a heat exchanger unit that is part of the passive safety system which provides cooling to the AP1000 reactor during emergency situations.
PRS	Plant Reference Simulator – a training simulator with full functionality that can be used in all stages of operator training.
PWS	The Potable Water System - which provides potable water to the site.
QA	Quality Assurance – The planned and systematic activities implemented in a quality system so that the quality requirements for a product or service will be fulfilled.
QA/QC	Quality Assurance/Quality Control.
QC	Quality Control – The observation techniques and activities used to fulfill requirements for quality.
RAI	Requests for Additional Information issued by the NRC staff to license applicants.
RCA	Root Cause Analysis – identification and evaluation of the reason for non-conformance, an undesirable condition, or a problem which (when solved) restores the status quo.
RCL	The Reactor Coolant Loop – the piping and related equipment that transports heat from the reactor to the steam generator.
RCP	The Reactor Cooling Pump which forms part of the Reactor Coolant System.

Acronym or Defined Term	Reference
RCS	The Reactor Coolant System - the complete system for transferring and transporting heat from the reactor to the steam generator.
RFI	Requests for Information issued by the NRC staff to licensees.
ROW	Right-of-way.
RT	Radiographic Testing - a nondestructive testing method of inspecting materials for hidden flaws by using the ability of short wavelength electromagnetic radiation (high energy photons) to penetrate various materials.
RWS	Raw Water System – the system for withdrawing and transporting raw water from the Monticello Reservoir.
SAT	Site Acceptance Testing.
SCDHEC	The South Carolina Department of Health and Environmental Control.
SCDNR	The South Carolina Department of Natural Resources.
SCE&G or The Company	South Carolina Electric & Gas Company.
SDS	Sanitary Drain System.
Shaw	The Shaw Group.
SMS	Shaw Module Solutions, LLC.
SNC	Southern Nuclear Company – a subsidiary of Southern Company and licensed operator of the Vogtle Nuclear Units and two other nuclear plants.
SRO	Senior Reactor Operator.
SROC	Senior Reactor Operator Certification.
Target	Costs under the EPC Contract where targets have been established but where SCE&G pays actual costs as incurred.
TEi	Thermal Engineering International – a subsidiary of Babcock Power which
VIEGA D	manufactures moisture separator reheaters and other power plant equipment.
UFSAR	Updated Final Safety Analysis Report.
Units	V. C. Summer Nuclear Station Units 2 & 3.
Update Docket	A proceeding under the BLRA seeking Commission approval of updated cost and construction schedules for the Units.
URI	Unresolved Items – A term used by the NRC during inspections for items that require further action.
USACOE	The United States Army Corps of Engineers.
VCSNS or VCSN	V. C. Summer Nuclear Station.
WEC	Westinghouse Electric Company, LLC.
WEC/CB&I	The consortium formed by Westinghouse Electric Company, LLC and CB&I.
WEC/CB&I	WEC/CB&I's claims for additional charges associated with the COLs delay, the Shield
Claims	Building design changes, the structural modules design changes, and the lower than anticipated rock elevations encountered in certain areas within the Unit 2 Nuclear Island.
WTP	The Off-Site Water Treatment Plant which will take water from Lake Monticello and treat it to potable water standards.
WWS	The Waste Water System – the system for collection, treatment and disposal of domestic waste water generated on site.

Acronym or Defined Term	Reference
YFS	The Yard Fire System – the system that provides fire detection and protection outside of the plant.
ZRS	The Construction and Offsite Power System –the system which provide electrical power to the site.

APPENDIX 1

V. C. Summer Nuclear Station Units 2 & 3

Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

Quarter Ending March 31, 2013

Appendix 1 lists and updates each of the milestones which the Commission adopted as the Approved Construction Schedule for the Units, pursuant to S.C. Code Ann. § 58-33-270(B)(1) in Order No. 2012-884. **Appendix 1** provides columns with the following information:

- 1. Milestone tracking ID number.
- 2. The description of the milestone as updated in Order No. 2012-884.
- 3. The BLRA milestone date as approved by the Commission in Order No. 2012-884.
- 4. The current milestone date.
- 5. For each actual completed milestone, the date by which it was completed. For milestones completed prior to the current reporting quarter, the milestone entry is shaded in gray. For milestones completed during the current reporting quarter, the milestone entry is shaded in green. For milestones with planned completion dates that vary in days instead of months, the milestone entry is shaded in yellow.
- 6. Information showing the number of months, if any, by which a milestone has been shifted.
- 7. Information as to whether any milestone has been shifted outside of the 18/24 Month Contingency approved by the Commission.
- 8. Information as to whether any current change in this milestone is anticipated to impact the substantial completion date.
- 9. Notes.

On the final page of the document, there is a chart summarizing milestone completion and movement comparing the current milestone date to the milestone date approved in Order No. 2012-884. This movement is shown for only the milestones that have not been completed.

Appendix 1 VC Summer Units 2 and 3

	COURT No. 2012 BB, Darotpine		Targette Targette Completion Onto	Įį	Data Hontha From Order No. 2012-884 Data	18.21 18.21 19.00 10.00		
,	Approve Engineering Procurement and Construction			9000/20/3		2	Ç.	
1		Complete		5/23/2008		ON.	2	
2	Issue P.O.'s to nuclear component fabricators for Units 2 and 3 Containment Vessels	Complete		12/3/2008		No	No	
	Contractor Issue PO to Passive Residual Heat Removal Heat							
8	Exchanger Fabricator - First Payment - Unit 2	Complete		8/18/2008		No	No	
4	Contractor Issue PO to Accumulator Tank Fabricator - Unit 2	Complete		7/31/2008		No	No	
	Contractor Issue PO to Core Makeup Tank Fabricator - Units							
2	2 k 3	Complete		9/30/2008		SO NO	ON No	
9	Contractor Issue PO to Squib Valve Fabricator - Units 2 & 3	Complete		3/31/2009		No	No	
	Contractor Issue PO to Steam Generator Fabricator - Units 2			0000,007.2		•	å	
7	&3	Complete		5/29/2008		No No	S	
· 00	Contractor Issue Long Lead Material PO to Reactor Coolant Pump Fabricator - Units 2 & 3	Complete		6/30/2008		No	°N	
6	Contractor Issue PO to Pressurizer Fabricator - Units 2 & 3	Complete		8/18/2008		No	ON	
								-
10	- First Payment - Units 2 & 3	Complete		6/20/2008		No	N _O	
ŗ	Reactor Vessel Internals - Issue Long Lead Material PO to	Complete		11/21/2008		Ž	ž	
1	Contractor Issue I one Lead Material PO to Reactor Vessel	2011						
12	Fabricator - Units 2 & 3	Complete		5/29/2008		No	No	
Ĺ	Contractor Issue PO to Integrated Head Package Fabricator	Complete		7/31/2009		ON.	ON	
	Control Rod Drive Mechanism Issue PO for Long Lead							
14	Material to Fabricator - Units 2 and 3 - first payment	Complete		6/21/2008		No	No	
	Issue P.O.'s to nuclear component fabricators for Nuclear					;	;	
15	Island structural CA20 Modules	Complete		8/28/2009		ON.	ON	
16	Start Site Specific and balance of plant detailed design	Complete		9/11/2007		No	O.	

Appendix 1
VC Summer Units 2 and 3

					the state of the s			
			25.52 25.53	į				
		Order No.		Companies	F 22.5	Months Contribution		Naka.
	Instrumentation & Control Simulator - Contractor Place							
17	Notice to Proceed - Units 2 & 3	Complete		10/31/2008		S _O	No	
	Steam Generator - Issue Final PO to Fabricator for Units 2			9000/00/0		Ž	Ž	,
18	and 3	Complete		6/30/2008		ON	000	
	Reactor Vessel Internals - Contractor Issue PO for Long Lead							
,	Material (Heavy Plate and Heavy Forgings) to Fabricator -	Complete	-	1/29/2010		2	2	
2	Units 2 & 3	COMPICE		10-1-				
2	Contractor Issue Final PO to Reactor Vessel Fabricator - Units 2 & 3	Complete		9/30/2008		No	No	
	Variable Frequency Drive Fabricator Issue Transformer PO -							
21	Units 2 & 3	Complete		4/30/2009		No	No	
22	Start clearing, grubbing and grading	Complete		1/26/2009		No	S _O	
	Core Makeup Tank Fabricator Issue Long Lead Material PO -							
23	Units 2 & 3	Complete		10/31/2008		2	S	
	Accumulator Tank Fabricator Issue Long Lead Material PO -					;	;	
24	Units 2 & 3	Complete		10/31/2008		ON.	02	
	Pressurizer Fabricator Issue Long Lead Material PO - Units 2					,	;	-
22	ജ	Complete		10/31/2008		S	SS.	
	Reactor Coolant Loop Pipe - Contractor Issue PO to				.,,	<u>.</u>	ź	
56	Fabricator - Second Payment - Units 2 & 3	Complete		4/30/2009		ON .	2	
	Integrated Head Package - Issue PO to Fabricator - Units 2	·				2	Ž	
72	and 3 - second payment	Complete		//31/2009		2	QN	
	Control Rod Drive Mechanisms - Contractor Issue PO for			יסטרי סרי י		Ź	2	
88	Long Lead Material to Fabricator - Units 2 & 3	Complete		6/30/2000		2		
	Contractor Issue PO to Passive Residual Heat Removal Heat		-					
53	Exchanger Fabricator - Second Payment - Units 2 & 3	Complete		10/31/2008		No	2	
8	Start Parr Road intersection work.	Complete		2/13/2009		S _o	Š	
	Reactor Coolant Pump - Issue Final PO to Fabricator - Units 2							
31	and 3	Complete		6/30/2008		S.	٤	
	Integrated Heat Packages Fabricator Issue Long Lead					;	;	
32	Material PO - Units 2 & 3	Complete		10/1/2009		2	ON	
33	Design Finalization Payment 3	Complete		1/30/2009		No No	No	

gend = Complesed = Complesed this Quarter = 2 Mr. venera in Days Only

Appendix 1
VC Summer Units 2 and 3

a de la companya de l								
			o I I Š	Actual	Data Months from Order No. 2012-884]		
Q	Code 18. 2012-884 Departmen	2012-88s Code		88	8			
34	Start site development	Complete		6/23/2008		No	No	
	Contractor Issue PO to Turbine Generator Fabricator - Units	4		0000/01/6		S	Z	-
£	Z & 3	CONTINECE		C002/CT /2				,
36	Contractor Issue PO to Main Transformers Fabricator - Units 2 & 3	Complete		9/25/2009		No	N	
	Core Makeup Tank Fabricator Notice to Contractor Receipt							
37	of Long Lead Material - Units 2 & 3	Complete		12/30/2010		No	No	
88	Design Finalization Payment 4	Complete		4/30/2009		No	No	
2	Turbine Generator Fabricator Issue PO for Condenser	Complete		8/28/2009		Q.	Ŷ.	
ñ	Material - Unit 2	CONDICKE		2022 627				
·	Reactor Coolant Pump Fabricator Issue Long Lead Material	Complete		4/30/2009		No	. <mark>O</mark>	
3	LULK - VIIILS C & 3	33.31d						
41	Passive Residual Heat Removal Heat Exchanger Fabricator Receint of Long Lead Material - Units 2 & 3	Complete		5/27/2010	-	No	No	
42	Design Finalization Payment 5	Complete		7/31/2009		No	oN	
ř								
	Start erection of construction buildings, to include craft							
	facilities for personnel, tools, equipment; first aid facilities;							
٠	field offices for site management and support personnel;						;	
43	temporary warehouses; and construction hiring office.	Complete		12/18/2009		S S	ON.	
	Reactor Vessel Fabricator Notice to Contractor of Receipt of						;	
4	Flange Nozzle Shell Forging - Unit 2	Complete		8/28/2009		2	ON I	
45	Design Finalization Payment 6	Complete		10/7/2009		2	S N	
	Instrumentation and Control Simulator - Contractor Issue							
	PO to Subcontractor for Radiation Monitor System - Units 2						,	
46	83	Complete		12/17/2009		S	S	
	Reactor Vessel Internals - Fabricator Start Fit and Welding of							
47	Core Shroud Assembly - Unit 2	Complete		7/29/2011		S _O	Š	
	Tucking Congestor Eshricator legge DO for Maiching							
48	Separator Reheater/Feedwater Heater Material - Unit 2	Complete		4/30/2010		No	No	
	Reactor Coolant Loop Pipe Fabricator Acceptance of Raw							
49	Material - Unit 2	Complete		2/18/2010		No No	No.	

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Appendix 1 VC Summer Units 2 and 3

i i		Octave No.	13-10 Tange and Missions Completion	Complete District	Deta Months from Order No. 2017-484 Deta	Outside •19-24 Months	Substantial Comparation Date	
	Reactor Vessel Internals - Fabricator Start Weld Neutron							
20	Shield Spacer Pads to Assembly - Unit 2	Complete		8/28/2012		No	No	
51	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 2	Complete		6/30/2008		O.	ON	
:	Contractor Notified that Pressurizer Fabricator Performed			0,007,007,00		•	1	
7	Cladding on bottom head - Unit 2	Сотріете		12/23/2010		ON	NO NO	
53	Start excavation and foundation work for the standard plant for Unit 2	Complete		3/15/2010		No	ON .	
54	Steam Generator Fabricator Notice to Contractor of Receipt of 2nd Steam Generator Tubesheet Forging - Unit 2	Complete		4/30/2010		No	No	
55	Reactor Vessel Fabricator Notice to Contractor of Outlet Nozzle Welding to Flange Nozzle Shell Completion - Unit 2	Complete		12/30/2010		N _O	ON	
56	Turbine Generator Fabricator Notice to Contractor Condenser Fabrication Started - Unit 2	Complete		5/17/2010		Š	No	
57	Complete preparations for receiving the first module on site for Unit 2.	Complete		1/22/2010		ON	No	
58	Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Transition Cone Forging - Unit 2	Complete		4/21/2010		NO ON	S S	
59	Reactor Coolant Pump Fabricator Notice to Contractor of Manufacturing of Casing Completion - Unit 2	Complete		11/16/2010		No	N _O	
9	Reactor Coolant Loop Pipe Fabricator Notice to Contractor of Machining, Heat Treating & Non-Destructive Testing Completion - Unit 2	Complete		3/20/2012		No	S.	
61	Core Makeup Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 2	Complete		11/26/2012		No	Š	
79	Polar Crane Fabricator Issue PO for Main Hoist Drum and Wire Rope - Units 2 & 3	Complete		2/1/2011		No	Š	
63	Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 3	Complete		6/14/2011		No	N _O	

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Appendix 1 VC Summer Units 2 and 3

			19-10 Targeted Missions Completion Date	M.	Design shortfully from Organ and 2017/4844 Design		Separate Sep	
urbine	Turbine Generator Fabricator Notice to Contractor							
onden	Condenser Ready to Ship - Unit 2	Complete		3/26/2012		No	No	
tart pla	Start placement of mud mat for Unit 2	Complete		7/20/2012		No	No	·
team (Steam Generator Fabricator Notice to Contractor of Receipt					;	;	
of 1st Si	of 1st Steam Generator Tubing - Unit 2	Complete		9/28/2010		Q.	So	
ressur	Pressurizer Fabricator Notice to Contractor of Welding of			1000000		ş	Ž	
Jpper a	Upper and Intermediate Shells Completion - Unit 2	Complete		10/28/2011		2	2	
Seactor	Reactor Vessel Fabricator Notice to Contractor of Closure	Complete		6/28/2012		Ž	Š	
ead .	Head Cladding Completion - Unit 3	Complete		2,02/07/0			S S	
Jegin C	Begin Unit 2 first nuclear concrete placement	Complete		3/9/2013		2	2	
Reacto	Reactor Coolant Pump Fabricator Notice to Contractor of				٠			
tator	Stator Core Completion - Unit 2	Complete		12/1/2011		No No	No.	
abrica	Fabricator Start Fit and Welding of Core Shroud Assembly -							
Unit 2		Complete		7/29/2011		S _O	S	
team	Steam Generator Fabricator Notice to Contractor of							
Comple	Completion of 1st Steam Generator Tubing Installation -							
Unit 2		Complete		1/27/2012		No	No	
Reacto Unit 2	Reactor Coolant Loop Pipe - Shipment of Equipment to Site - Unit 2	12/31/2012	9/30/2013		+9 Month(s)	No	O.	Due to deviation notices related to bend radius.
Contro	Control Rod Drive Mechanism - Ship Remainder of							
Equipn	Equipment (Latch Assembly & Rod Travel Housing) to Head							
Supplie	Supplier - Unit 2	Complete		7/16/2012		No	No	
Pressu	Pressurizer Fabricator Notice to Contractor of Welding of							
Lower	Lower Shell to Bottom Head Completion - Unit 2	Complete		12/22/2011		No	No	
Steam	Steam Generator Fabricator Notice to Contractor of							
Comple	Completion of 2nd Steam Generator Tubing Installation -							
Unit 2		Complete		5/4/2012		N _o	S No	
Design	Design Finalization Payment 14	Complete		10/31/2011	3	S N	No	-
Į to	Set module CADA for I Init 2	11/6/2012	8/6/2013		+9 Month(s)	S.	S S	Due to schedule retinement and review.
_	ספר הוסממום כאסא נסו סוווג א		12.12					

Appendix 1 VC Summer Units 2 and 3

				3	Due to schedule relitiering and review.	Due to rework of one casing.				Due to schedule remement and review.		Due to schedule refinement and review.		Due to schedule refinement and review.	Due to design changes.
	ON N	ON.	No	No	No No	ON O	No	No	No	No	No	No	No	ON	ON
şji	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Della Months from Order No. 2012-884 Della					+8 Month(s)	+11 Month(s)				+8 Month(s)		+4 Month(s)		+7 Month(s)	+11 Month(s)
	5/24/2011	5/29/2012	10/23/2012					3/29/2012	11/9/2011		5/10/2012		3/6/2013		
				8/31/2013	9/4/2013	6/11/2013	8/31/2013			2/3/2014		7/31/2013		1/10/2014	2/28/2014
	Complete	Complete	Complete	8/31/2013	1/7/2013	7/31/2012	8/31/2013	Complete	Complete	6/26/2013	Complete	3/31/2013	Complete	6/28/2013	3/31/2013
102,202,000	Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Final Post Weld Heat Treatment -	Passive Residual Heat Removal Heat Exchanger Fabricator	Polar Crane Fabricator Notice to Contractor of Girder Fabrication Completion - Unit 2	Turbine Generator Fabricator Notice to Contractor	Set Containment Vessel ring #1 for Unit 2	Reactor Coolant Pump Fabricator Delivery of Casings to Port of Export - Unit 2	Reactor Coolant Pump Fabricator Notice to Contractor of	States Controlled to the State of Receipt of Receipt of Reactor Vessel Fabrica Unit 2	Contractor Notified that Pressurizer Fabricator Performed	Set Nuclear Island structural module CA03 for Unit 2	Squib Valve Fabricator Notice to Contractor of Completion	Accumulator Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	Polar Crane Fabricator Notice to Contractor of Electric Panel	Assembly Completion - One -	Integrated Head Package - Shipment of Equipment to Site - Unit 2
	Q.E.		8 2	6	83 83	8	5 8	8	00	88	8	6	3	5	93

Appendix 1 VC Summer Units 2 and 3

			Ş					
i i	Code (10, 2017) C. J. Denga pilon.	Code (Sc Or (Sc or (Des		ij	Deals Months from Order No. 2012-884	Outside +184-24 Morrina Contragance/	Onesis de la constante de la c	
	Reactor Coolant Pump Fabricator Notice to Contractor of						i	Due to delay in predecesor
94	Final Stator Assembly Completion - Unit 2	5/31/2013	9/30/2013		+4 Month(s)	No	No	schedule activities.
	Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation -							Oue to schedule refinement
95	Unit 3	6/30/2013	7/31/2013		+1 Month(s)	_S	No	and review.
	Steam Generator Fabricator Notice to Contractor of Sair Factory Completion of 1st Seam Generator Budgmest							
96	Unit 2	Complete		1/14/2013		8	Q	
	Start concrete fill of Nuclear Island structural modules CA01							Due to schedule refinement
97	and CA02 for Unit 2	4/3/2014	7/22/2014		+3 Month(s)	^S	No	and review.
	Passive Residual Heat Removal Heat Exchanger - Delivery of		0 000) 00/ 1					Due to schedule refinement
8	Equipment to Port of Entry - Unit 2	12/31/2012	7/31/2013		+7 Month(s)	S ₀	No	and review.
g	Refueling Machine Fabricator Notice to Contractor of		6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		:	;	:	-
T	satisfactory completion of Factory Acceptance Test - Unit 2	11/30/2013	10/31/2013		-1 Month(s)	SN N	ON	Schedule ahead of plan.
100	Deliver Reactor Vessel Internals to Port of Export - Unit 2	1/31/2014	5/31/2014		+4 Month(s)	No	No	Due to schedule refinement and review.
101	Set Unit 2 Containment Vessel #3	4/24/2014	10/20/2014		+6 Month(s)	N	N _o	Due to schedule refinement and review.
	Steam Generator - Contractor Acceptance of Equipment at							Due to schedule refinement
102	Port of Entry - Unit 2	7/31/2013	9/30/2013		+2 Month(s)	°N	No	and review.
	Turbine Generator Fabricator Notice to Contractor Turbine							Due to schedule refinement
103	Generator Ready to Ship - Unit 2	4/30/2013	5/31/2013		+1 Month(s)	No	No	and review.
	Pressurizer Fabricator Notice to Contractor of Satisfactory							
コ	Completion of Hydrotest - Unit 3	3/31/2014	12/31/2013		-3 Month(s)	No	No	Schedule ahead of plan.
T	Polar Crane - Shipment of Equipment to Site - Unit 2	1/31/2014	11/30/2013		-2 Month(s)	No	No	Schedule ahead of plan.
106	Receive Unit 2 Reactor Vessel on site from fabricator	5/13/2014	8/31/2013		-9 Month(s)	No	No	Schedule ahead of plan.
107	Set Unit 2 Reactor Vessel	6/23/2014	7/18/2014		+1 Month(s)	No	N _O	Due to schedule refinement and review.
	Steam Generator Fabricator Notice to Contractor of							
901	Completion of 2nd Channel Head to Tubesheet Assembly	. 200/ 20/ 02	, , , , , , ,			;	;	Due to schedule refinement
٦	weiging - Unit 3	12/31/2013	2/28/2014		+2 Month(s)	No	No	and review.

South Carolina Electric & Gas Company

PUBLIC VERSION

Appendix 1 VC Summer Units 2 and 3

				\neg		\neg					\neg			T.	<u>,</u> [
	Due to schedule refinement and review.	Due to schedule refinement and review.	Due to schedule reinfernent and review.	Due to scriedule relinement and review.	and review.	Due to schedule refinement and review.	Due to schedule refinement and review.	Due to schedule rennement and review.	Schedule ahead of plan.	Schedule ahead of plan.		Schedule ahead of plan.	Schedule ahead of plan.	Schedule ahead of plan.	and review.	Due to schedule refinement and review.
	O.	NO	No	No	No	No	No	No	No	S _O	S _O	NO	ON.	ON	No	ON
	No	No	No	No	No	No	No	No	O.	O.	ON.	S _O	2	No	No	ON
	+4 Month(s)	+1 Month(s)		+1 Month(s)	+2 Month(s)	+5 Month(s)	+7 Month(s)	+3 Month(s)	-1 Month(s)	-3 Month(s)			-4 Month(s)	-4 Month(s)	+2 Month(s)	+3 Month(s)
										- 10	2	20	4	4		25
13-10 Targeted Milestone Completion Date	12/31/2014	11/30/2013	10/13/2013	11/14/2014	11/30/2013	7/31/2014	5/24/2013	8/27/2014	1/31/2015	3/31/2015	2/28/2015	2/3/2015	12/31/2014	10/31/2014	3/26/2015	9/30/2015
	8/31/2014	10/31/2013	10/9/2013	10/23/2014	9/30/2013	2/28/2014	10/11/2012	5/16/2014	2/28/2015	6/30/2015	2/28/2015	2/5/2015	4/30/2015	2/28/2015	1/9/2015	6/30/2015
	Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 3	Reactor Coolant Pump - Shipment of Equipment to Site (2 Reactor Coolant Pumps) - Unit 2	Place first nuclear concrete for Unit 3	Set Unit 2 Steam Generator	Main Transformers Ready to Ship - Unit 2	Complete Unit 3 Steam Generator Hydrotest at fabricator	Set Unit 2 Containment Vessel Bottom Head on basemat	Set Unit 2 Pressurizer Vessel	Reactor Coolant Pump Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 3	Deliver Reactor Vessel Internals to Port of Export - Unit 3	Main Transformers Fabricator Issue PO for Material - Unit 3	Complete welding of Unit 2 Passive Residual Heat Removal System piping	Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 3	Refueling Machine - Shipment of Equipment to Site - Unit 3	Set Unit 2 Polar Crane	Reactor Coolant Pumps - Shipment of Equipment to Site - Unit 3
89	B 901													122	173	124

Appendix 1 VC Summer Units 2 and 3

	Schedule ahead of plan.		Due to schedule refinement and review.	review of startup schedule.	and review.	and review.	and review.	review of startup schedule.		Schedule ahead of plan.	Schedule ahead of plan.	and review.	Schedule ahead of plan.	Due to logic remement and review of startup schedule.	Schedule ahead of plan.	Due to schedule retinement and review.	Due to logic refinement and review of startup schedule.	Due to logic refinement and review of startup schedule.	Schedule ahead of plan.	Due to logic refinement and review of startup schedule.
	No	No	No	No	N _O	No	No	No	No	No	No	No	No	No	ON.	ON.	NO.	Q.	2	ON.
	No	No	No	No	No	No	No	No	ON	No	No	No	N _O	ON O	No	No	Š	2		
Data Months from Order No. 2012-864 Data	-2 Month(s)		+7 Month(s)	+1 Month(s)	+1 Month(s)		+2 Month(s)	+3 Month(s)		-3 Month(s)	-3 Month(s)		-4 Month(s)	+1 Month(s)	-2 Month(s)	+2 Month(s)		2 Month(s)	4 Month(s)	
						9	2	9		2	2	.5	9.	9.	91	5	9	1	1 2 2	17
13-10 Targeted Milestone Completion Date	5/31/2015	7/31/2014	3/26/2014	2/25/2016	4/28/2015	5/11/2016	10/15/2015	12/11/2016	3/15/2017	7/7/2015	11/17/2015	7/22/2015	2/17/2016	6/9/2016	3/30/2016					
	7/31/2015	7/31/2014	8/14/2013	1/22/2016	3/15/2015	5/3/2016	8/25/2015	9/15/2016	3/15/2017	10/22/2015	2/25/2016	7/16/2015	6/16/2016	5/9/2016	5/26/2016	11/7/2014	E /1E /2016	200/00/0	3/22/2017	11/15/2017
	Main Transformers Ready to Ship - Unit 3	Spent Fuel Storage Rack - Shipment of Last Rack Module -	Ctart electrical cable pulling in Unit 2 Auxiliary Building	Complete Unit 2 Reactor Coolant System cold hydro	Artivate class 1F DC power in Unit 2 Auxiliary Building.	Complete Init 2 hat functional test.	Install Unit 3 ring 3 for containment vessel	install Circle in Section 2011	Load Unit 2 flucted luci	Ollit 2 Substantial Completion	Set Unit 3 Reactor Vessel	Set Unit 3 Prescuring Vessel	Complete welding of Unit 3 Passive Residual Heat Removal	Set Unit 3 polar crane	o china buildian roof clah rahar nlaramant	Start Onk 3 Shield building Lool stab repair praceries	Start Unit 3 Auxiliary Bulluling electrical cadre pulling	Activate Unit 3 Auxillary Building class at DC power	Complete Unit 3 Reactor Coolant System cold hydro	Complete Unit 3 hot functional test Complete Unit 3 nuclear fuel load
	125		127	128	179	130	121	101	132	CCT	134	136	27	138		139	140	141	142	143

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Appendix 1 VC Summer Units 2 and 3

46.1	<u> </u>						1
	Due to logic refinement and review of startup schedule.						
	ON	No					
Constant Months	ON	No	28%		23%	10%	%0
			146 =	13-10;	146 =	146 =	146 =
			out of	2012-884 vs.	out of	out of	out of
	4/27/2018	5/15/2018	84	ent - Order No.	34	15	0
MI APPO	4/8/2018	5/15/2018	Milestones Completed	Milestone Movement - Order No. 2012-884 vs. 13-1Q:	a) Forward Movement	Backward Movement	17 Month range
	Begin Unit 3 full power operation	ial Completion	SUMMARY Total Milesto	2	a) Forv	b) Backv	Milestones Within +12 to +17 Month range
		Unit 3 Substantial Completion					
je	145	146					

Lagend = Completed = Completed the Querue = Xovernor in Day Ordy

South Carolina Electric & Gas Company

V. C. Summer Nuclear Station Units 2 & 3

Quarterly Report to the South Carolina Office of Regulatory Staff Submitted by South Carolina Electric & Gas Company Pursuant to Public Service Commission Order No. 2009-104(A)

Quarter Ending March 31, 2013

Appendix 2 is an updated and expanded version of the information contained in the capital cost schedule approved by the Commission in Order No. 2012-884.

Appendix 2 shows:

- 1. The actual expenditures on the project by plant cost category through the current period.
- 2. The changes in capital costs reflecting the Company's current forecast of expenditures on the project for each future period by plant cost category. In updating its cost projections the Company has used the current construction schedule for the project and the Commission-approved inflation indices as set forth in **Appendix 4** to this report.
- 3. The cumulative CWIP for the project and the balance of CWIP that is not yet reflected in revised rates.
- 4. The current rate for calculating AFUDC computed as required under applicable FERC regulations.

The Cumulative Project Cash Flow target as approved in Order No. 2012-884 and as updated for escalation and other Commission-approved adjustments is found under the heading "Per Order 2012-884 Adjusted." The adjustments reflect:

- 1. Changes in inflation indices.
- 2. Budget Carry-Forward Adjustments used, where appropriate to track the effect of lower-than-expected cumulative costs on the future cumulative cash flow of the project.

Appendix 2 also shows the cumulative cash flow for the project based on actual expenditures to date and the current construction schedule and forecast of year-by-year costs going forward. This information is found under the heading "Actual through March 2013 plus Projected."

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

				•									
Annual Project Cash Flow(per order) Capital Cost Rescheduling Contingency	5,516,849	21,723	100,905	340,003	398,551	349,061	713,307	950,179	1,007,569	831,281	521,351	201,408	81,510
Budget Carry-Forward Adjustment _ Net	5,516,849	21,723	100,905	340,003	398,551	349,061	713,307	950,179	1,007,569	831,281	521,351	201,408	81,510
Adjusted for Change in Escalation	5,468,545	21,723	100,905	340,003	398,551	349,061	704,909	962,459	966,798	809,680	504,346	199,304	80,804
Cumulative Project Cash Flow(Target)		21,723	122,629	462,632	861,183	1,210,244	1,915,153	2,877,612	3,874,410	4,684,090	5,188,436	5,387,741	5,468,545
Actual through March 2013* plus												i	
riojecieu	L			Actua	a					Projected	ted		
Plant Cost Categories	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	<u>2016</u>	2017	2018
Fixed with No Adjustment Firm with Fixed Adjustment A								7					
Firm with Fixed Adjustment B													
Firm with Indexed Adjustment						CONFIDENT							
Non-Labor Costs Time & Materials													
Owners Costs Transmission Costs	329,512	٠	26	724	927	11,964	51,641	80,506	58,435	51,564	66,042	7,683	
Total Base Project Costs(2007 \$)	4,548,405	21,723	97,386	319,073	374,810	314,977	488,425	754,998	832,663	659,539	413,543	201,410	69,858
Total Project Escalation	974,232	,	3,519	20,930	23,741	34,084	74,481	172,730	212,872	190,564	133,277	78,288	29,745
Total Revised Project Cash Flow	5,522,637	21,723	100,905	340,003	398,551	349,061	562,906	927,729	1,045,535	850,103	546,819	279,698	99,603
Cumulative Project Cash Flow(Revised)		21,723	122,629	462,632	861,183	1,210,244	1,773,150	2,700,878	3,746,413	4,596,516	5,143,335	5,423,033	5,522,637
ΔΕΠΟ(Canitalized Interest)	243,198	645	3,497	10,564	17,150	14,218	18,980	30,583	55,259	45,021	28,937	15,820	2,523
Gross Construction	5,765,835	22,368	104,403	350,567	415,701	363,278	581,886	958,312	1,100,795	895,124	575,757	295,518	102,126
Construction Work in Progress		22,368	126,771	477,338	893,039	1,256,317	1,838,203	2,796,515	3,897,310	4,792,434	5,368,191	5,663,709	5,765,835
CWIP Currently in Rates		i			1,536,466								
March 31, 2013 Actual Incremental CWIP Not Currently in Rates	ly in Rates				439,386								
*Applicable Index escalation rates for 2013 are estimated. Escalation is subject to restatement	lation is subject to r	estatement whe	n actual indices	when actual Indices for 2013 are final	=								
Notes: 2013-2018 AFUDC rate applied	%60'9												

[&]quot;Applicable index escalation rates for 2013 are estimated. Escalation is subject to restatement when actual indices for 2013 are final.

V. C. Summer Nuclear Station Units 2 & 3

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For comparison purposes, **Appendix 3** provides the schedule of capital costs for the project which was approved by the Commission in Order No. 2012-884 as the Approved Capital Cost of the Units, pursuant to S.C. Code Ann. § 58-33-270(B)(2). **Appendix 3** also reflects the forecast of AFUDC expense based on these adjusted schedules and the AFUDC rates that were current at the time of Order No. 2012-884. **Appendix 3** is intended to provide a fixed point of reference for future revisions and updating. While the schedule of costs contained on **Appendix 3** is subject to revision for escalation, changes in AFUDC rates and amounts, capital cost scheduling contingencies and other contingency adjustments as authorized in Order No. 2009-104(A), no such adjustments have been made to the schedules presented here.

Appendix 3

RESTATED and UPDATED CONSTRUCTION EXPENDITURES (Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Per Order 2012-884

	_			Actual	i i					Projected			
Plant Cost Categories Fixed with No Adjustment Firm with Fixed Adjustment A Firm with Indexed Adjustment B Firm with Indexed Adjustment Actual Creft Wages Non-Labor Costs Time & Materials Owners Costs	<u>Total</u>	2007	2008				VTIA	2013	2014	2015	2016	2017	2018
Transmission Costs	329,512	,	56	724	927	11,964	57,206	56,903	57,508	066'22	64,727	1,537	•
Total Base Project Costs(2007 \$)	4,548,405	21,723	97,386	319,073	374,810	314,977	613,678	780,753	792,394	647,295	386,537	142,999	56,781
Total Project Escalation	968,444		3,519	20,930	23,741	34,084	069'66	169,425	215,175	183,987	134,815	58,409	24,729
Total Revised Project Cash Flow	5,516,849	21,723	100,905	340,003	398,551	349,061	713,307	950,179	1,007,569	831,281	521,351	201,408	81,510
Cumulative Project Cash Flow(Revised)		21,723	122,629	462,632	861,183	1,210,244	1,923,551	2,873,730	3,881,299	4,712,580	5,233,931	5,435,339	5,516,849
AFUDC(Capitalized Interest)	237,715	645	3,497	10,564	17,150	14,218	20,449	38,384	42,868	40,888	27,518	15,391	6,144
Construction Work in Progress		22,368	126,771	477,338	893,039	1,256,317	1,990,074	2,978,637	4,029,074	4,901,243	5,450,113	5,666,911	5,754,565

V. C. Summer Nuclear Station Units 2 & 3

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Appendix 4 shows the changes in the inflation indices approved in Order No. 2009-104(A). Included is a ten year history of the Handy-Whitman All Steam Index, South Atlantic Region; the Handy-Whitman All Steam and Nuclear Index, South Atlantic Region; the Handy-Whitman All Transmission Plant Index, South Atlantic Region; and the Chained GDP Index. The change in the relevant indices from the Combined Application is also provided.

Appendix 4, Chart A

Inflation Indices, Chart A

HW All Steam Generation Plant Index, January 2013

<u>(ear</u>	Index	Yr/Yr change	Three Year Average	Five Year Average	Ten Year Average
က	607	4.84%	4.24%	3.25%	4.95%
2	579	4.51%	2.19%	3.91%	4.71%
_	554	3.36%	2.30%	4.73%	
0	536	-1.29%	3.89%	5.21%	
6	543	4.83%	7.19%	7.19%	
2008	518	8.14%	7.50%	6.65%	
7	479	8.62%	7.66%	5.51%	
9	441	2.76%	5.49%	4.17%	
55	417	8.59%	4.39%		
4	384	2.13%	2.17%		
33	376	2.45%			
2	367	1.94%			
_	360				

Update	4.84%
<u>Jan-13</u>	3.25%
Order 2012-884	4.51%
<u>Jan-12</u>	3.91%
Order 2011-345	4.79%
<u>Jul-10</u>	5.31%
Order 2010-12	4.83%
<u>Jan-09</u>	7.19%
BLRA Filing <u>Jul-07</u>	7.68% 5.74%

HW All Steam Index: One year Five Year

Appendix 4, Chart B

Inflation Indices, Chart B

HW All Steam and Nuclear Generation Plant Index, January 2013

																	;	Update Jan-13		5.19%	3.32%
Ten Year Average	4.99%	4.72%																Order 2012-884 Jan-12	Š	4.52%	3.87%
Five Year Average	3.32%	3.87%	4.74%	5.26%	7.20%	99.9	5.57%	4.19%										Order 2011-345 Jul-10	ò	4.60%	5.32%
Three Year Average	4.29%	2.20%	2.30%	3.89%	7.21%	7.52%	7.75%	5.51%	4.40%	2.18%								Order 2010-12 Jan-09		4.84%	7.20%
Yr/Yr change	5.19%	4.52%	3.17%	-1.11%	4.84%	7.93%	8.86%	5.77%	8.62%	2.13%	2.46%	1.95%					BLRA	Filing Jul-07		7.69%	5.75%
Index	809	578	553	536	542	517	479	440	416	383	375	366	359			_					
Year	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001						HW All Steam/Nuclear Index:	One year	Five Year

Appendix 4, Chart C

Inflation Indices, Chart C

HW All Transmission Plant Index, January 2013

Year	<u>Index</u>	Yr/Yr change	Three Year Average	Five Year Average	Ten Year Average
2013	265	3.29%	2.40%	2.10%	4.90%
2012	578	2.48%	-0.07%	3.00%	4.55%
2011	564	1.44%	1.57%	4.33%	
2010	556	-4.14%	3.68%	5.74%	
2009	580	7.41%	8.11%	8.60%	
2008	540	7.78%	8.48%	7.71%	
2007	501	9.15%	9.27%	6.10%	
2006	459	8.51%	7.21%	4.76%	
2005	423	10.16%	4.28%		
2004	384	2.95%	1.72%		
2003	373	-0.27%			
2002	374	2.47%			
2001	365				
	BLRA				
-	Filing	Order 2010-12	Order 2011-345	Order 2012-884	Update
	Jul-07	<u>Jan-09</u>	<u>Jul-10</u>	<u>Jan-12</u>	<u>Jan-13</u>
HW All Transmission Plant Index					
One year	8.82%	7.41%	2.08%	2.48%	3.29%
Five Year	6.86%	8.60%	5.23%	3.00%	2.10%

Appendix 4
Inflation Indices, Chart D
ODF Chained Price Index, 2012

	Chained Price Index—Gross Domestic Product U.S. Marco. 10 Year Baseline (2005-100) Chanad price is Annual Percent change 2-Year Annual Percent change 2-Year Annual Percent change Cho Year Annual Percent Change Chot was price Tradex Allulahan	Index	L3.5 Nato - 10 Year Baseline (1982=1.0) Producer price effects change foreign change foreign change foreign change foreign change foreign change foreign change 10 Year Annual Percent change
	tit Product (2005=100) Chanad price index-gross domestic product , Source: BEA, Units: index- 2005=100,0	Consumer price index, all-urban , Source: BLS , Units: - 1902-84=1,00	(1982=1.0) Producer price index-finished goods , Source: BLS , Units: index-1982=1.0
310	45158933	45158182	45159751
1999	86.77	1.67	1.33
2000	68,65 2,17%	3.37%	1.38 3.76%
2001	90,65 2,26%	1.77 2.82%	1,54%
2002	92.11 1.61% 2.01%	1.80 1.60% 2.59%	1,39 -1,30% 1,44%
2003	94.10 2.16% 2.01%	1.84 2.30% 2.24%	1.43 3.18% 1.26%
2004	96,77 2,84% 2,20% 2,21%	1.89 2.67% 2.19% 2,55%	1.49 3.98% 1.93% 2.29%
2005	100.00 3.34% 2.78% 2.44%	1.95 3.37% 2.78% 2.55%	1.56 4.70% 3.95% 2.48%
2006	104.21 4.21% 1 3.46% 2.83% 2	2.02 3.23% 3.09% 2.63%	1.60 2.56% 3.74% 2.60%
2007	106.23 10 1.94% 2.2 3.16% 2.3 1.89% 2.9	2.86% 4.3.15% 3.4.2.88% 3.	1.67 4.38% 6.1 3.87% 4.
2008 2009	108,57 109,53 7,20% 0,88% 2,78% 1,67% 2,90% 2,51%	2.16 2.15 4.17% -0.46% 3.42% 2.17% 3.26% 2.62%	1.78 1.73 6.59% -2.81% 4.50% 2.64% 4.43% 3.03%
00 2010	53 111,00 % 1.34% % 1.47% % 2.11%	15 2.18 1% 1.40% 1.68% 1.68% 1.68%	•
2031	2.14% 2.14% 1.45% 1.70%	3.21% 3.21% 1.37% 2.22% 2.43%	
20	115,39 1,78% 1,75% 1.67% 2,28%	2,30 2,22% 2,27% 2,10% 2,49%	1,57% 3,89% 3,04% 3,40%

Update Jan-13 1.78%

Order 2011-346 Order 2012-884 <u>Jul-19</u> Jan-12

Order 2010-12 Jan-09 2.24%

BLRA Filing Jul-07

GDP Chained Price index One year Five Year

2.11%

0.43%

V. C. Summer Nuclear Station Units 2 & 3

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Appendix 5 indicates those LARs that have been submitted by SCE&G to the NRC for review. Included is the title of each LAR, a brief description of the change(s) associated with the LAR, and the date the LAR was submitted to the NRC.

V.C. Summer Units 2 and 3 License Amendment Requests (LARs) Currently Under NRC Review Appendix 5

Topic	Description of Change	Submittal Date
LAR 12-01 - Additional Electrical Penetration Assemblies	Provide additional penetrations of the Containment Vessel to allow sufficient space for electrical and instrument cables	8/29/2012
LAR-12-02 – Tier 1 Table 3.3-1 Discrepancies – PAR Utilized	Conform the current ITAAC standards used to verify the shield building wall thickness to align with those approved in DCD Rev. 19	9/26/2012
LAR 13-01 - Basemat Shear Reinforcement Design Spacing Requirements - PAR Utilized	Clarify the provisions for maximum spacing of the shear reinforcement in the basemat below the auxiliary building to be consistent with requirements shown in existing FSAR figures.	1/15/2013 Approved 2/26/2013
LAR 13-02 - Basemat Shear Reinforcement Design Details - PAR Utilized	Revises the requirements for development of basemat shear reinforcement in the licensing basis from ACI 349 Appendix B to ACI 318-11, Section 12.6. The use of ACI 318 criteria for headed reinforcement results in longer shear ties and thicker concrete in areas below the elevator pits and a sump in the nuclear island basemat.	1/18/2013 Approved 3/1/2013
LAR 13-03 - Turbine Building Eccentric and Concentric Bracing	Revises the turbine building main area to use a mixed bracing system using eccentrically and concentrically braced frames as a means of preventing the turbine building from collapsing onto the Nuclear Island (NI) during a seismic event. The structural design code is also changed to a code that includes adequate provisions for the new bracing system	2/7/2013

V.C. Summer Units 2 and 3 License Amendment Requests (LARs) Currently Under NRC Review Appendix 5

Topic	Description of Change	Submittal Date
LAR 13-04 - Reconciliation of Tier 1 Valve Differences	Reconciles valve related information contained in Tier I material to be consistent with corresponding Tier 2 material currently incorporated in the UFSAR.	2/7/2013
LAR 13-05 - Structural Modules Shear Stud Size and Spacing	Revises Note 2 of UFSAR Figure 3.8.3-8, Sheet 1, which presents typical structural wall module details. This information needs to be changed to be consistent with the design basis calculations.	2/14/2013
LAR 13-06 - Primary Sampling System Changes	Alters the design of the Primary Sampling System (PSS) by replacing a check valve with a solenoid-operated gate valve, modifying the PSS inside-containment header and adding a PSS containment penetration.	2/7/2013
LAR 13-07 - Changes to the Chemical and Volume Control System (CVS)	Alters the design of the Chemical and Volume Control System (CVS) by adding/changing valves, separating the zinc and hydrogen injection paths and relocating the zinc injection point.	3/13/2013
LAR 13-08 - Module Obstructions and Details	Withdrawn after review with NRC-see Letter NND-13-202	2/28/2013
LAR 13-10- Human Factors Engineering Integrated System Validation Plan	LAR 13-10- Human Factors Engineering Integrated Revises referenced document APP-OCS-GEH-320 From System Validation Plan	3/13/2013
LAR 13-11 - NI Wall Reinforcement Criteria -PAR Utilized	Revises structural code criteria for anchoring reinforcement bar within the NI walls (adopts ACI-318 for this purpose)	3/26/2013

The gaps in LAR number sequencing are due to the order of submittal to the NRC.